

## WILDLAND FIRES IN ALASKA

Fires burn hundreds of thousands of acres every year. As a result, fire management is a high priority for all land use agencies, and cooperative planning is essential in Alaska. The Alaska Interagency Wildland Fire Management Plan provides an opportunity, through cooperative planning with land and resource managers, to accomplish fire-related land-use and resource management objectives in a cost-efficient manner. The Alaska Interagency Wildland Fire Management Plan recognizes that lightning-caused fires are an important natural component of the boreal forest and arctic tundra ecosystems, but the natural role of fire in the environment must be tempered by the need to protect human life and health, private property, and cultural resources.

### The Objectives of the Alaska Interagency Wildland Fire Management Plan are to:

- Ensure that firefighter and public safety is the highest priority.
- Establish wildland fire management option boundaries based on protection of human life, private property, high-value resources, and vegetation characteristics.
- Provide appropriate suppression actions on fires that threaten human life, identified private property, or high-value resources with available firefighting resources and without compromising firefighter or public safety.
- Weigh the cost of fire suppression actions against the values of the resource warranting protection while considering firefighter and public safety, benefits, and resource objectives.
- Minimize any adverse environmental impact of fire suppression activities.

## WHAT ABOUT SMOKE?

Smoke . . .

- is a mixture of particles and gases given off through combustion.
- has color and other characteristics that change depending upon vegetation and the rate of combustion.
- is transported by surface, low-level, and upper-level winds.
- may stay in valleys or basins if cool air is trapped at the surface beneath warmer air.

When you encounter smoke, stop and think about the value of fires to Alaskan ecosystems.

At times, smoke from wildland and prescribed fires can and does drift into populated areas. Land managers, suppression agencies, and air quality regulators work cooperatively to try to minimize the chances that this will happen.

Cooperative activities include:

- Statewide smoke management protocols.
- Prescribed burn permits that specify conditions for burning.
- Monitoring smoke conditions.
- Changing suppression tactics on fires.

People with existing respiratory and heart ailments are particularly sensitive to smoke. Children and the elderly are also at risk. If you experience health effects from smoke, seek medical attention. You may need to stay indoors with windows and doors closed and reduce physical exertion outside as much as possible.

For more information on air quality and smoke, see the Alaska Department of Environmental Conservation website at:  
<http://www.dec.state.ak.us/air/smokemain.htm>.

## FIRE FACTS

- Resource managers are now challenged to find ways to sustain habitat in the face of increasing human population and recreational use.
- To date, two of Alaska's top three wildland fire seasons have happened in two consecutive years. About 4.5 million acres burned in 2005, Alaska's third largest wildland fire season, and 6.7 million acres burned in 2004, the largest season since reliable records began in the 1950s.
- In Alaska, lightning starts around 200 fires per year and humans cause around 400 per year.
- Between 1980 and 2006, lightning caused 5,499 fires which burned 27.8 million acres: 94% of the 29.7 million acres burned during those years.

**To Report a Fire call  
911 or 1-800-237-3633**

**For Current Fire Information Call  
907-356-5511  
or visit  
<http://fire.ak.blm.gov>**



<http://fire.ak.blm.gov/administration/awfcg.php>



# Managing Fire and Smoke in Alaska



## FIRE MANAGEMENT OPTIONS

The Alaska Interagency Wildland Fire Management Plan establishes four fire management options for determining initial attack priorities and responses. Using these management options in cooperative planning efforts ensures that (1) human life, private property, and identified resources receive an appropriate level of protection with available firefighting resources; (2) the cost of the suppression effort is commensurate with values identified for protection; and (3) the ability of land managers to achieve their individual management objectives is optimized. The four fire management options are:

**Critical Management Option:** The critical management option was specifically created to give

the highest priority to suppression action on wildland fires that threaten human life, inhabited property, designated physical developments, and to structural resources designated as National Historic Landmarks. Fires occurring in or immediately threatening this designation will receive highest priority for protection from wildland fires.

**Full Management Option:** The full management option was established for the protection of cultural and historical sites, uninhabited private property, natural resource high-value areas, and other high-value areas that do not involve the protection of human life and inhabited property. Fires occurring within or immediately threatening this designation will receive aggressive initial attack, depending on the availability of suppression resources.

**Modified Management Option:** The modified management option is intended to provide a higher level of protection when fire danger or risks are high, and a lower level of protection when fire danger or risks are low. The intent is not to minimize acres burned, but to balance acres burned with suppression costs and to accomplish land and resource management objectives. Depending on fire danger or risk, fires in these areas may receive initial attack or periodic surveillance.

**Limited Management Option:** The limited management option was established for areas where the cost of suppression may exceed the value of the resources to be protected, the environmental impacts of fire suppression activities may have more negative impacts on the resources than the effects of the fire,

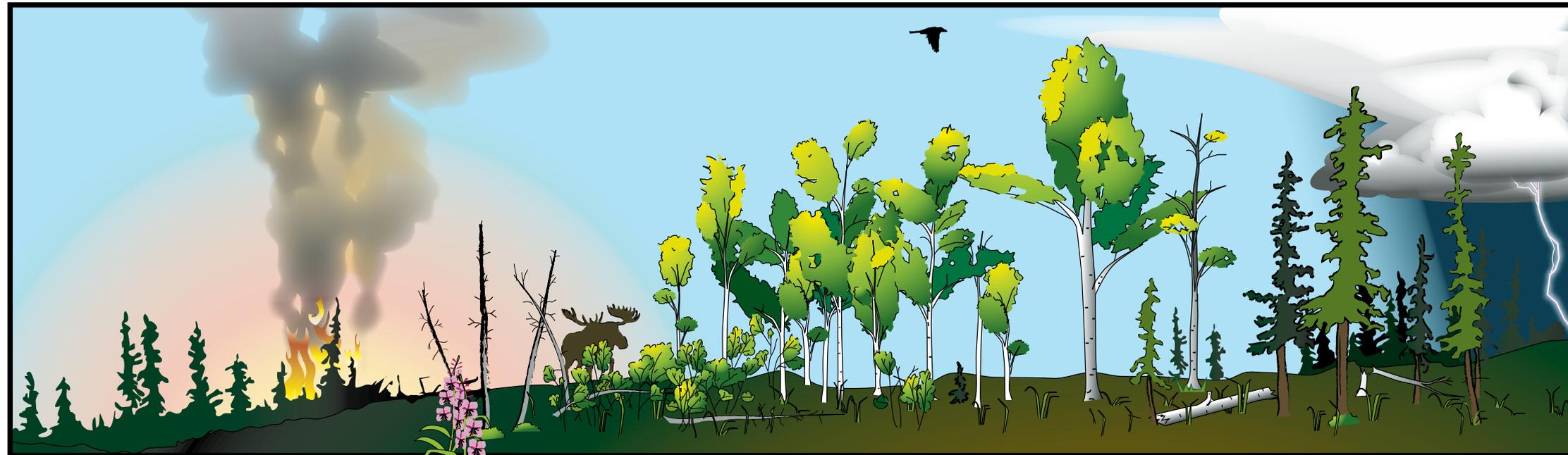
or the exclusion of fire may be detrimental to the fire-dependent ecosystem. *Fires in these areas receive periodic surveillance. If necessary, additional suppression actions may be taken to keep a fire within the boundary of the management option or to protect identified higher value areas or sites.*

## Good Fire Management Planning Can:

- Help suppression agencies improve their ability to protect high-value resources.
- Help land managers maintain lightning-caused fire as an important ecological process in boreal forest and tundra ecosystems.
- Help reduce smoke impacts over the long term.
- Help land managers use prescribed burning as a resource management tool. Prescribed fires are set under specifically selected conditions to achieve land management objectives.

## Boreal Forest Succession:

The stages of plant and animal life that follow fire are called succession. The pattern of plant succession depends on soil and fire severity. In most of Interior Alaska, plant succession follows the same basic pattern. The next time you pass the site of an old wildland fire, can you guess how long ago it burned?



0-1 year:  
Newly burned,  
little or no growth

1-5 years:  
Moss and herbs

3-30 years:  
Tall shrubs and  
saplings

26-45 years:  
Dense trees

45-100 years:  
Hardwoods and  
spruce

150-300 years:  
Spruce forest

## Properly Managed Fires Can:

- Create breaks in vegetation to stop or slow the advance of wildland fires.
- Clear land, reduce fire hazard, and allow for other uses.
- Shape the landscape by creating changes that enhance habitat diversity and use by wildlife.
- Warm the soil and increase nutrient cycling.